7   records, each search request record including a search request identifier identifying a

8   unique combination of keywords, and a result set identifier identifying a subset of a

9   plurality of records in a database that match the unique combination of keywords, and the

10   program further configured to generate a result set identifying the subset of records

11   identified in the result set identifier in the located search request record.

1   66. (ADDED) The program product of claim 65, wherein the signal bearing medium

2   includes at least one of a recordable medium and a transmission type medium.

REMARKS

This paper is submitted in reply to the Office Action dated April 6, 2001, within the three-month period for response. Reconsideration and allowance of all pending claims are respectfully requested.

In the subject Office Action, claims 1-3, 5-16, 18-27 and 38 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,855,015 to Shoham, while claims 4 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shoham in view of the publication, "Content-Based, Collaborative Recommendation," Marko Balabanovic and Yoav Shoham, Proceeding of the ACM March 1997 (hereinafter "Content-Based, Collaborative Recommendation").

Applicants respectfully traverse the Examiner's rejections to the extent that they are maintained.

As an initial matter, Applicants have added new claims 48-66, which correspond to claims 28-37 and 39-47 as originally filed. As such, no new matter is being added by the above amendments, as the amendments are fully supported in the specification, drawings and claims as originally filed. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attachment is captioned "Version with Markings to Show Changes Made."

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By way of introduction, Applicants' claims are generally directed to improving the retrieval and/or ordering of database records presented as search results through the use of user feedback recovered from users based upon their interaction with such records. It is believed that by tracking user interactions with various database records, more responsive and useful database query results can be generated and presented to users, thus facilitating user retrieval of useful information from a database.

Now turning to the rejections, and in particular to the rejection of independent claim 1, this claim recites, *inter alia*, a method of accessing a database in which records in a result set are ordered using a user feedback parameter associated with each record in the result set. In addition, for each of the records, the user parameter associated therewith is selectively updated in response to detecting <u>multiple accesses</u> thereto by a user. As discussed, for example, at page 4, lines 10-15 of the application, weighting a record in response to multiple accesses to that record by a user is based on the assumption that a user that revisits a particular record does so because the record is more relevant than a record that the user visits only once, or not at all.

In rejecting claim 1, the Examiner relies on Shoham, and particularly the passage at column 12, lines 19-67, for allegedly disclosing the selective updating of a user feedback parameter associated with a record in response to detecting multiple accesses thereto. However, Applicants can find no disclosure in this passage, or anywhere else in Shoham, of any detection or monitoring of multiple accesses to a record. In fact, the only discussion of feedback in the cited passage is found at lines 28-36, which refers to receiving an evaluation value (an integer in the range of -5 to +5) from a user, which is used to update the weights in a user profile vector M. The evaluation value appears to be nothing more than a ranking selected by a user, and this value is not even used to update a parameter associated with a <u>record</u>. Thus, Applicants respectfully submit that claim 1 is novel over Shoham.

Applicants also respectfully submit that claim 1 is non-obvious over Shoham, as there is no suggestion in the reference for tracking the <u>number</u> of accesses to a particular document by a user. Absent any such suggestion, a *prima facie* case of obviousness cannot be maintained.

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Accordingly, reconsideration and allowance of claim 1, as well as claims 2-10 which depend therefrom, are therefore respectfully requested.

Moreover, with respect to independent claims 11 and 12, each of these claims likewise recites updating a user feedback parameter associated with a record in response to multiple accesses to such a record by a user. Therefore, for the same reasons presented above with respect to claim 1, claims 11 and 12 are also novel and non-obvious over Shoham. Reconsideration and allowance of claims 11 and 12, and claim 13 which depends therefrom, are therefore respectfully requested.

Next, with regard to independent claim 14, this claim recites a method of accessing a database which includes *inter alia* updating a user feedback parameter for a record in response to detecting that the record is the most recently accessed record in a result set. As discussed at page 4 of the specification, weighting a record in this manner is based upon the assumption that a last-viewed record in a result set is more likely to be the record that best answered a user's query.

In rejecting this claim, however, the Examiner fails to cite any passage in Shoham that even arguably discloses or suggests this claimed feature. In fact, at paragraph 3 of the subject Office Action, claim 14 is addressed in a group with claim 1, with the same passages in Shoham apparently relied upon to reject each claim. In fact, it appears the Examiner has doen nothing more than attempt to group the various independent claims together to define a single "gist" of the invention. However, every limitation in a claim must be disclosed by a single prior art reference to support an anticipation rejection; rejecting a claim based upon a "gist" of the invention analysis is improper. In the instant case, the Examiner fails to address any of the specific limitations in claim 14 (particularly those that differ from claim 1), and as such, the rejection thereof is deficient on its face.

Irrespective of the deficiency of the Examiner's support of the rejection, even a cursory review of Shoham will reveal that the reference fails to disclose or suggest weighting a user feedback parameter for a record based upon its relative temporal access versus other records within a result set. Accordingly, Applicants respectfully submit that claim 14 is novel and non-

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obvious over Shoham. Reconsideration and allowance of claim 14, as well as claims 15-23 which depend therefrom, are therefore respectfully requested.

Moreover, as to independent claims 24 and 25, each of these claims likewise recites updating a user feedback parameter for a record in response to detecting that the record is the most recently accessed record in a result set. Thus, for the same reasons presented above with respect to claim 14, claims 24 and 25 are novel and non-obvious over the prior art of record. Reconsideration and allowance of these claims, as well as of claim 26 which depends therefrom, are therefore respectfully requested.

Next, as to independent claim 27, this claim recites a method of accessing a database which includes *inter alia* ordering records in a result set using a user feedback parameter for each record, with each user feedback parameter including a plurality of weights, each associated with a keyword. Moreover, claim 27 recites that ordering of the records includes only those weights associated with keywords that match a search request.

In rejecting claim 27, the Examiner relies on the passages in Shoham recited in connection with claims 1 and 2, namely, column 12, lines 19-67 and column 11, lines 1-20. However, Applicants can find no disclosure in the cited passages, or anywhere else in Shoham, that corresponds to a user feedback parameter that includes a plurality of weights, coupled with an ordering of records in a result set based upon only those weights in a user feedback parameter that are associated with keywords that match a search request. Moreover, Shoham appears to provide no suggestion of the use of multiple weights in a user feedback parameter whatsoever.

As with the rejection of claim 14, the rejection of claim 27 amounts to nothing more than an attempt to reject all of the claims based upon a "gist" of the invention analysis. The rejection lacks any careful consideration of the specific limitations in claim 27, or any analysis of how the reference can be applied to those limitations. Accordingly, the Examiner's rejection of claim 27 is also deficient on its face. Moreover, given there is no disclosure or suggestion of these claimed features in Shoham, Applicants respectfully submit that claim 27 is novel and non-obvious over the prior art of record. Reconsideration and allowance of claim 27, as well as new claims 48-54 which depend therefrom, are therefore respectfully requested.

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In addition, the Examiner will note that new claims 55 and 56 likewise recite a user feedback parameter including a plurality of weights, each associated with a keyword, with records in a search request ordered by using only those weights associated with keywords that match a search request. Accordingly, claims 55 and 56 are also novel and non-obvious over the prior art of record for the reasons presented above with respect to claim 27. Reconsideration and allowance of claims 55 and 56, as well as claim 57 which depends therefrom, are therefore respectfully requested.

Next, as to independent claim 38, this claim recites a method of processing search requests submitted to a search engine which includes *inter alia* accessing a search request data structure in response to a search request to locate a search request record that includes a search request identifier identifying a unique combination of keywords matching a plurality of keywords presented in the search request. As discussed, for example, at page 25 of the application, one embodiment of the invention may utilize a search request database structure that stores prior searches and the search results thereof to enhance the retrieval of search results for given combinations of search words. Thus, rather than having to construct new result sets from scratch in response to every search request, a search request data structure may be utilized to retrieve previously-stored search results based upon the same set of keywords.

In rejecting claim 38, the Examiner relies on the passages cited in rejecting claims 1 and 6, but fails to specifically address the limitations of claim 38.

With respect to the passages cited against claim 1, the Examiner relies on column 12, lines 19-67, which allegedly deals with updating a user feedback parameter in response to detecting multiple accesses to a record. This recitation, however is not even in claim 38, and as such, reliance on this passage is in error.

As to the passages cited against claim 6, the Examiner relies on column 5, lines 62-67 and column 6, lines 13-20 of Shoham for allegedly teaching accessing a search request data structure. However, the former passage deals only with information resources and hyperlinks embedded therein. The latter passage deals only with the configuration of the information resources as HTML documents and the use of Hypertext Transfer Protocol (HTTP) for exploring and

retrieving information resources specified by URL's. Neither passage is at all relevant to a search request data structure as recited in claim 38. Accordingly, the Examiner has provided no basis whatsoever for supporting the rejection of claim 38.

A review of Shoham reveals that the reference does not even arguably disclose a structure analogous to a search request data structure that can be used to retrieve previously-generated search results in response to a search request for a plurality of keywords matching a record in the data structure. Accordingly, claim 38 is novel and non-obvious over the prior art of record. Reconsideration and allowance of claim 38, as well as new claims 58-63 which depend therefrom, are therefore respectfully requested.
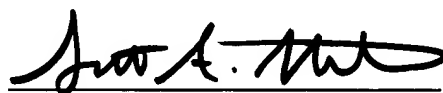
Moreover, as to new independent claims 64 and 65, each of these claims recites a search request data structure similar to that of claim 38. Accordingly, these claims are novel and non-obvious over the prior art of record for the same reasons as claim 38. Reconsideration and allowance of claims 64 and 65, as well as claim 66 which depends therefrom, are therefore respectfully requested.

In summary, Applicants respectfully submit that all pending claims are novel and non-obvious over the prior art of record. Reconsideration and allowance of all pending claims are therefore respectfully requested. If the Examiner has any questions regarding the foregoing, or which might otherwise further this case onto allowance, the Examiner may contact the undersigned at (513) 241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

6 JULY 2001
_____
Date

Scott A. Stinebruner (signature)

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Claims 48-66 have been added. The current claims are as follows:

1   1. A method of accessing a database, the method comprising:

2   (a) in response to a search request, generating a result set including identifications

3   of a subset of a plurality of records in a database that match the search request;

4   (b) ordering the identifications of the records in the result set using a user

5   feedback parameter associated with each record in the result set; and

6   (c) for each of the plurality of records, selectively updating the user feedback

7   parameter associated therewith in response to detecting multiple accesses thereto by a

8   user.

1   2. The method of claim 1, wherein selectively updating the user feedback parameter

2   includes increasing a weight for the user feedback parameter associated with a first record in

3   response to the number of times a user accesses the first record.

1   3. The method of claim 1, further comprising increasing a weight for the user feedback

2   parameter associated with a first record in response to the first record being the most recently

3   accessed record in the result set.

1   4. The method of claim 1, wherein the user feedback parameter associated with each

2   record includes a plurality of weights, each weight associated with a keyword in the associated

3   record, and wherein ordering the records in the result set using the user feedback parameter

4   associated with each record in the result set includes ordering the records using any weight

5   associated with a keyword matching the search request.

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1   5. The method of claim 4, wherein selectively updating the user feedback parameter

2   includes increasing a first weight for the user feedback parameter associated with a first record in

3   response to receipt of a search request matching a first keyword associated with the first weight.

1   6. The method of claim 1, wherein generating the result set includes accessing a search

2   request data structure that includes a plurality of search request records, each including a search

3   request parameter identifying a unique combination of keywords, and a result set parameter

4   identifying a subset of records in the database that match the unique combination of keywords.

1   7. The method of claim 1, wherein ordering the identifications of the records in the result

2   set using the user feedback parameter associated with each record in the result set includes:

3   (a) partitioning the result set into a plurality of relevance groups, with each

4   relevance group including identifications of records having like relevancies to the search

5   request; and

6   (b) sorting the identifications of records within each relevance group according to

7   the user feedback parameters associated therewith.

1   8. The method of claim 1, wherein each record in the database includes a Uniform

2   Resource Identifier (URL) that identifies a document stored on a computer network, wherein

3   selectively updating the user feedback parameter includes selectively updating the user feedback

4   parameter associated with a first record in the database in response to detecting multiple accesses

5   to the document stored at the URL associated with the first record.

1   9. The method of claim 8, wherein generating the result set includes generating at least

2   one hypertext document including a plurality of hypertext links, each of which configured to

3   access a document identified by a record in the result set.

1   10. The method of claim 9, wherein generating the hypertext document includes

2   generating a script associated with at least one of the records in the result set, the script

3   configured to generate a notification that the associated record has been accessed by a user, and

4   wherein detecting multiple accesses to the document stored at the URL associated with the first

5   record includes receiving the notification.

1   11. An apparatus, comprising:

2   (a) a memory within which is resident a plurality of records from a database, each

3   record associated with a user feedback parameter;

4   (b) a first program, resident in the memory, the first program configured to, in

5   response to a search request, generate a result set including identifications of a subset of

6   the plurality of records that match the search request, and to order the identifications of

7   the records in the result set using the user feedback parameter associated with each record

8   in the result set; and

9   (c) a second program, resident in the memory, the second program configured to,

10   for each of the plurality of records, selectively update the user feedback parameter

11   associated therewith in response to multiple accesses thereto by a user.

1   12. A program product, comprising:

2   (a) a first program configured to, in response to a search request, generate a result

3   set including identifications of a subset of a plurality of records in a database that match

4   the search request, and to order the identifications of the records in the result set using a

5   user feedback parameter associated with each record in the result set;

6   (b) a second program configured to, for each of the plurality of records,

7   selectively update the user feedback parameter associated therewith in response to

8   multiple accesses thereto by a user; and

9   (c) a signal bearing medium bearing the first and second programs.

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1   13. The program product of claim 12, wherein the signal bearing medium includes at

2 least one of a recordable medium and a transmission type medium.

1   14. A method of accessing a database, the method comprising:

2   (a) in response to a search request, generating a result set including identifications

3 of a subset of a plurality of records in a database that match the search request;

4   (b) ordering the identifications of the records in the result set using a user

5 feedback parameter associated with each record in the result set; and

6   (c) for each of the plurality of records in the database, selectively updating the

7 user feedback parameter associated therewith in response to detecting that the record is

8 the most recently accessed record in the result set.

1   15. The method of claim 14, wherein selectively updating the user feedback parameter

2 includes increasing a weight for the user feedback parameter associated with a first record in

3 response to the first record being the most recently accessed record in the result set.

1   16. The method of claim 14, further comprising increasing a weight for the user feedback

2 parameter associated with a first record in response to the number of times a user accesses the

3 first record.

1   17. The method of claim 14, wherein the user feedback parameter associated with each

2 record includes a plurality of weights, each weight associated with a keyword in the associated

3 record, and wherein ordering the records in the result set using the user feedback parameter

4 associated with each record in the result set includes ordering the records using any weight

5 associated with a keyword matching the search request.

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1   18. The method of claim 17, wherein selectively updating the user feedback parameter

2   includes increasing a first weight for the user feedback parameter associated with a first record in

3   response to receipt of a search request matching a first keyword associated with the first weight.

1   19. The method of claim 14, wherein generating the result set includes accessing a search

2   request data structure that includes a plurality of search request records, each including a search

3   request parameter identifying a unique combination of keywords, and a result set parameter

4   identifying a subset of records in the database that match the unique combination of keywords.

1   20. The method of claim 14, wherein ordering the identifications of the records in the

2   result set using the user feedback parameter associated with each record in the result set includes:

3   (a) partitioning the result set into a plurality of relevance groups, with each

4   relevance group including identifications of records having like relevancies to the search

5   request; and

6   (b) sorting the identifications of records within each relevance group according to

7   the user feedback parameters associated therewith.

1   21. The method of claim 14, wherein each record in the database includes a Uniform

2   Resource Identifier (URL) that identifies a document stored on a computer network, wherein

3   selectively updating the user feedback parameter includes selectively updating the user feedback

4   parameter associated with a first record in the database in response to detecting that the document

5   stored at the URL associated with the first record is the most recently accessed document

6   identified in the result set.

1   22. The method of claim 21, wherein generating the result set includes generating at least

2   one hypertext document including a plurality of hypertext links, each of which configured to

3   access a document identified by a record in the result set.

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1   23. The method of claim 22, wherein generating the hypertext document includes

2   generating a script associated with at least one of the records in the result set, the script

3   configured to generate a notification of when the associated record was accessed by a user, and

4   wherein detecting that the document stored at the URL associated with the first record is the most

5   recently accessed document identified in the result set includes receiving the notification.

1   24. An apparatus, comprising:

2   (a) a memory within which is resident a plurality of records from a database, each

3   record associated with a user feedback parameter;

4   (b) a first program, resident in the memory, the first program configured to, in

5   response to a search request, generate a result set including identifications of a subset of

6   the plurality of records that match the search request, and to order the identifications of

7   the records in the result set using the user feedback parameter associated with each record

8   in the result set; and

9   (c) a second program, resident in the memory, the second program configured to,

10   for each of the plurality of records, selectively update the user feedback parameter

11   associated therewith in response to detecting that the record is the most recently accessed

12   record in the result set.

1   25. A program product, comprising:

2   (a) a first program configured to, in response to a search request, generate a result

3   set including identifications of a subset of a plurality of records in a database that match

4   the search request, and to order the identifications of the records in the result set using a

5   user feedback parameter associated with each record in the result set;

6   (b) a second program configured to, for each of the plurality of records,

7   selectively update the user feedback parameter associated therewith in response to

8   detecting that the record is the most recently accessed record in the result set; and

9   (c) a signal bearing medium bearing the first and second programs.

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1   26. The program product of claim 25, wherein the signal bearing medium includes at

2   least one of a recordable medium and a transmission type medium.

1   27. A method of accessing a database, the method comprising:

2   (a) in response to a search request, generating a result set including identifications

3   of a subset of a plurality of records in a database that match the search request;

4   (b) ordering the identifications of the records in the result set using a user

5   feedback parameter associated with each record in the result set, each user feedback

6   parameter including a plurality of weights, each weight associated with a keyword,

7   wherein ordering the identifications of the records includes using only those weights

8   associated with keywords that match the search request; and

9   (c) for each of the plurality of records in the database, selectively updating at least

10   one weight for the user feedback parameter associated therewith in response to user

11   interaction with the record.

1   28. - 37. (CANCELED)

1   38. A method of processing search requests submitted to a search engine, the method

2   comprising:

3   (a) receiving a search request that specifies a plurality of keywords;

4   (b) accessing a search request data structure in response to the search request, the

5   search request data structure including a plurality of search request records, each search

6   request record including a search request identifier identifying a unique combination of

7   keywords, and a result set identifier identifying a subset of a plurality of records in a

8   database that match the unique combination of keywords, wherein accessing the search

9   request data structure includes searching the search request data structure to locate a

10   search request record including a search request identifier that matches the plurality of

11   keywords in the search request; and

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12   (c) generating a result set identifying the subset of records identified in the result

13   set identifier in the located search request record.

1   39. - 47. (CANCELED)

1   48. (ADDED) The method of claim 27, wherein selectively updating at least one weight

2   for the user feedback parameter includes, in response to user interaction with a first record,

3   increasing any weight associated with the first record that is further associated with a keyword

4   matching an active search request for the user.

1   49. (ADDED) The method of claim 27, wherein selectively updating at least one weight

2   for the user feedback parameter includes increasing a first weight for the user feedback parameter

3   associated with a first record in response to detecting multiple accesses thereto by a user.

1   50. (ADDED) The method of claim 27, wherein selectively updating at least one weight

2   for the user feedback parameter includes increasing a first weight for the user feedback parameter

3   associated with a first record in response to the first record being the most recently accessed

4   record in the result set.

1   51. (ADDED) The method of claim 27, wherein generating the result set includes

2   accessing a search request data structure that includes a plurality of search request records, each

3   including a search request parameter identifying a unique combination of keywords, and a result

4   set parameter identifying a subset of records in the database that match the unique combination

5   of keywords.

1   52. (ADDED) The method of claim 27, wherein ordering the identifications of the records

2   in the result set using the user feedback parameter associated with each record in the result set

3   includes:

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4   (a) partitioning the result set into a plurality of relevance groups, with each

5 relevance group including identifications of records having like relevancies to the search

6 request; and

7   (b) sorting the identifications of records within each relevance group using the

8 weights from the user feedback parameters associated therewith.

1 53. (ADDED) The method of claim 27, wherein each record in the database includes a

2 Uniform Resource Identifier (URL) that identifies a document stored on a computer network,

3 wherein selectively updating the user feedback parameter includes selectively updating at least

4 one weight for the user feedback parameter associated with a first record in the database in

5 response to user interaction with the first record.

1 54. (ADDED) The method of claim 33, wherein generating the result set includes

2 generating at least one hypertext document including a plurality of hypertext links, each of which

3 configured to access a document identified by a record in the result set.

1 55. (ADDED) An apparatus, comprising:

2   (a) a memory within which is resident a plurality of records from a database, each

3 record associated with a user feedback parameter;

4   (b) a first program, resident in the memory, the first program configured to, in

5 response to a search request, generate a result set including identifications of a subset of

6 the plurality of records that match the search request, and to order the identifications of

7 the records in the result set using the user feedback parameter associated with each record

8 in the result set, wherein each user feedback parameter includes a plurality of weights,

9 wherein each weight is associated with a keyword, and wherein the first program is

10 configured to order the identifications of the records by using only those weights

11 associated with keywords that match the search request; and

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12   (c) a second program, resident in the memory, the second program configured to,

13   for each of the plurality of records, selectively update the user feedback parameter

14   associated therewith in response to user interaction with the record.

1   56. (ADDED) A program product, comprising:

2   (a) a first program configured to, in response to a search request, generate a result

3   set including identifications of a subset of a plurality of records in a database that match

4   the search request, and to order the identifications of the records in the result set using a

5   user feedback parameter associated with each record in the result set, wherein each user

6   feedback parameter includes a plurality of weights, wherein each weight is associated

7   with a keyword, and wherein the first program is configured to order the identifications of

8   the records by using only those weights associated with keywords that match the search

9   request;

10   (b) a second program configured to, for each of the plurality of records,

11   selectively update the user feedback parameter associated therewith in response to user

12   interaction with the record; and

13   (c) a signal bearing medium bearing the first and second programs.

1   57. (ADDED) The program product of claim 56, wherein the signal bearing medium

2 includes at least one of a recordable medium and a transmission type medium.

1   58. (ADDED) The method of claim 38, further comprising:

2   (a) for each of the plurality of records in the database, selectively updating a user

3   feedback parameter associated therewith in response to user interaction with the record;

4   and

5   (b) ordering the identifications of the subset of records in the result set using the

6   user feedback parameter associated with each record in the result set.

1   59. (ADDED) The method of claim 58, wherein the result set identifier for each search

2   request record further includes a copy of the user feedback parameter for each of the subset of

3   records identified thereby, and wherein selectively updating the user feedback parameter includes

4   updating each copy of the user feedback parameter in the search request data structure.

1   60. (ADDED) The method of claim 59, wherein the result set identifier for each search

2   request record further includes a list of record identifiers, each of which identifying a record in

3   the associated subset of records, and each of which associated with the copy of the user feedback

4   parameter for the associated record, the method further comprising ordering the list of record

5   identifiers identified by the result set identifier of a first search request record based upon the

6   copies of the user feedback parameters associated with the subset of records.

1   61. (ADDED) The method of claim 60, wherein the search request data structure

2   comprises a table, wherein each search request record comprises an entry in the table, and

3   wherein the result set identifier for each search request record comprises a linked list of record

4   identifiers.

1   62. (ADDED) The method of claim 61, further comprising sorting the table entries

2   responsive to frequency of access thereto.

1   63. (ADDED) The method of claim 62, further comprising:

2   (a) adding a new entry to the table in response to receiving a search request not

3   matching any existing entry in the table; and

4   (b) removing an entry from the table in response to a frequency of access therefor

5   falling below a predetermined threshold.

1   64. (ADDED) An apparatus, comprising:

2   (a) a memory within which is resident a search request data structure, the search

3   request data structure including a plurality of search request records, each search request

4   record including a search request identifier identifying a unique combination of

5   keywords, and a result set identifier identifying a subset of a plurality of records in a

6   database that match the unique combination of keywords;

7   (a) a program, resident in the memory, the program configured to, in response to

8   a search request that specifies a plurality of keywords, search the search request data

9   structure to locate a search request record including a search request identifier that

10   matches the plurality of keywords in the search request, and to generate a result set

11   identifying the subset of records identified in the result set identifier in the located search

12   request record.

1   65. (ADDED) A program product, comprising:

2   (a) a memory within which is resident a search request data structure, ;

3   (a) a program configured to, in response to a search request that specifies a

4   plurality of keywords, search a search request data structure to locate a search request

5   record including a search request identifier that matches the plurality of keywords in the

6   search request, the search request data structure including a plurality of search request

7   records, each search request record including a search request identifier identifying a

8   unique combination of keywords, and a result set identifier identifying a subset of a

9   plurality of records in a database that match the unique combination of keywords, and the

10   program further configured to generate a result set identifying the subset of records

11   identified in the result set identifier in the located search request record.

1   66. (ADDED) The program product of claim 65, wherein the signal bearing medium

2   includes at least one of a recordable medium and a transmission type medium.